

1 Results

This section summarizes the results of the analysis, starting with the pairwise Mood's Median tests followed by the results of the modeling process. Results are compared with the work of Horne et al. and Gruppi et al. to highlight overlaps and disagreements between their results and the results of this paper.

1.1 Mood's Median Test

For each feature described in ??, a Mood's Median Test was used to test for differences between real and fake news. The table below includes the result of these tests, excluding tests with resulting p-values of > 0.05 . For each predictor, the p-value of the test is given, along with a comparison of the groupwise medians to indicate which group is higher. Furthermore, as many of the features used in this paper are also used in O'Brien et al. and Gruppi et al., we indicate, when available, whether the results of these tests agree with the results found in both papers. As both papers First, a table including results for the body of articles is included, then for the titles.

Table 1.1: Results of Mood's Median Tests - Article Body

var	Result	pval_group	Gruppi et al.	O'Brien et al.
mu_sentence	Real > Fake	< 0.001	-	Disagree
mu_verb_phrase	Real > Fake	< 0.001	-	-
num_verb_phrase	Fake > Real	< 0.05	-	-
swc	Real > Fake	< 0.001	-	-
types	Fake > Real	< 0.05	-	-
tokens	Fake > Real	< 0.001	-	-
TTR	Real > Fake	< 0.001	-	Disagree
FOG	Real > Fake	< 0.001	-	-
SMOG	Real > Fake	< 0.001	Agree	-
FK	Real > Fake	< 0.001	Disagree	Agree

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CL	Fake > Real	< 0.01	-	-
ARI	Real > Fake	< 0.001	-	-
WC	Fake > Real	< 0.01	Disagree	-
Tone	Fake > Real	< 0.001	-	-
WPS	Real > Fake	< 0.001	Agree	-
shehe	Real > Fake	< 0.001	Agree	Disagree
article	Real > Fake	< 0.001	-	-
prep	Real > Fake	< 0.001	-	-
auxverb	Real > Fake	< 0.05	Agree	-
conj	Fake > Real	< 0.001	-	-
posemo	Fake > Real	< 0.001	-	-
negemo	Real > Fake	< 0.001	-	-
anger	Real > Fake	< 0.001	-	-
male	Real > Fake	< 0.001	-	-
cogproc	Fake > Real	< 0.001	-	-
insight	Real > Fake	< 0.05	-	-
discrep	Fake > Real	< 0.05	-	-
differ	Fake > Real	< 0.01	-	-
percept	Real > Fake	< 0.05	-	-
see	Real > Fake	< 0.001	-	-
hear	Real > Fake	< 0.001	-	-
feel	Real > Fake	< 0.01	-	-
bio	Real > Fake	< 0.001	-	-
body	Real > Fake	< 0.01	-	-
health	Real > Fake	< 0.05	-	-
drives	Fake > Real	< 0.001	-	-
affiliation	Fake > Real	< 0.001	-	-
achieve	Fake > Real	< 0.001	-	-
focuspast	Real > Fake	< 0.001	-	-
focuspresent	Fake > Real	< 0.001	-	-
relativ	Real > Fake	< 0.01	-	-
time	Real > Fake	< 0.001	-	-
work	Fake > Real	< 0.05	-	-
leisure	Real > Fake	< 0.001	-	-
money	Fake > Real	< 0.001	-	-
AllPunc	Fake > Real	< 0.01	-	-

Period	Fake > Real	< 0.001	-	-
Dash	Fake > Real	< 0.01	-	-
Quote	Real > Fake	< 0.001	-	Agree
Apostro	Real > Fake	< 0.05	-	-
Parenth	Fake > Real	< 0.01	-	-
CC	Fake > Real	< 0.01	-	-
DT	Fake > Real	< 0.05	-	Disagree
IN	Fake > Real	< 0.05	-	-
JJ	Fake > Real	< 0.01	-	-
MD	Fake > Real	< 0.05	-	-
NN	Fake > Real	< 0.001	-	Disagree
NNS	Fake > Real	< 0.001	-	-
NNP	Fake > Real	< 0.05	-	-
NNPS	Fake > Real	< 0.001	-	-
TO	Fake > Real	< 0.001	-	-
VB	Fake > Real	< 0.05	-	-
VCN	Fake > Real	< 0.01	-	-
VBP	Fake > Real	< 0.05	-	-
VBZ	Fake > Real	< 0.01	-	-
NER	Real > Fake	< 0.001	-	-
len	Fake > Real	< 0.001	-	-

blabla text body

Table 1.2: Results of Mood's Median Tests - Article Titles

var	Result	pval_group
types	Real > Fake	< 0.001
tokens	Real > Fake	< 0.001
TTR	Fake > Real	< 0.001
SMOG	Real > Fake	< 0.001
FK	Real > Fake	< 0.05
CL	Fake > Real	< 0.01
ARI	Real > Fake	< 0.05
WC	Real > Fake	< 0.001
WPS	Real > Fake	< 0.001

function.	Real > Fake	< 0.001
prep	Real > Fake	< 0.05
verb	Real > Fake	< 0.001
social	Real > Fake	< 0.001
space	Real > Fake	< 0.05
NNP	Real > Fake	< 0.001
len	Real > Fake	< 0.001

1.2 Modeling